

**Amendments to the Claims:**

This listing of the claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 (Currently amended). An immunizing composition, comprising an immunizing effective amount of an antigenic product which induces an immune response against an epitope that spans the  $\beta$ -secretase cleavage site of amyloid precursor protein (A $\beta$ PP) so as to inhibit cleavage of A $\beta$ PP by  $\beta$ -secretase, and a pharmaceutically acceptable carrier, diluent, excipient, adjuvant, or auxiliary agent, wherein said antigenic product comprises a display vehicle and an antigenic peptide displayed on said display vehicle, said antigenic peptide comprising a 6-14 amino acid residue A $\beta$ PP epitope that spans the  $\beta$ -secretase cleavage site of A $\beta$ PP.

2 (Currently amended). The immunizing composition of claim 152, wherein said display vehicle comprises a dendritic polymer, built on a core molecule, which is at least difunctional so as to provide branching, and containing up to 16 terminal functional groups to which said antigenic peptide is joined by covalent bonds.

3 (Original). The immunizing composition of claim 2, wherein said dendritic polymer contains eight terminal functional groups to which an antigenic peptide is joined.

4 (Previously Presented). The immunizing composition of claim 2, wherein said antigenic peptide comprises residues 1 to 8 of SEQ ID NO:1.

5 (Previously Presented). The immunizing composition of claim 2, wherein said antigenic peptide comprises the amino acid sequence of SEQ ID NO:5.

6 (Currently amended). The immunizing composition of claim 2, wherein said antigenic peptide comprises two overlapping A $\beta$ PP epitopes ~~of said that both span the  $\beta$ -secretase cleavage site of A $\beta$ PP.~~

7 (Original). The immunizing composition of claim 6, wherein said two overlapping A $\beta$ PP epitopes are identical.

8 (Original). The immunizing composition of claim 2, wherein said core molecule is lysine.

9 (Original). The immunizing composition of claim 2, further comprising a molecule having adjuvant properties joined to said dendritic polymer.

10 (Currently amended). The immunizing composition of claim 2\_1, wherein said antigenic product is encapsulated in a liposome.

11 (Currently amended). The immunizing composition of claim 452, wherein said display vehicle comprises a viral display vehicle displaying on its surface said antigenic peptide.

12 (Original). The immunizing composition of claim 11, wherein said viral display vehicle is a filamentous bacteriophage.

13 (Previously Presented). The immunizing composition of claim 11, wherein said antigenic peptide comprises residues 1 to 8 of SEQ ID NO:1.

14 (Previously Presented). The immunizing composition of claim 11, wherein said antigenic peptide comprises the amino acid sequence of SEQ ID NO:5.

15 (Currently Amended). A method for inducing an immune response against the  $\beta$ -secretase cleavage site of A $\beta$ PP, comprising administering the immunizing composition of claim 1 to a human subject in need thereof to induce an immune response against the  $\beta$ -secretase cleavage site of A $\beta$ PP and ~~block-inhibit~~  $\beta$ -secretase cleavage of A $\beta$ PP, thereby inhibiting the formation of amyloid  $\beta$ .

Claims 16-26 (Cancelled).

27 (Currently Amended). The immunizing composition of claim ~~251~~, wherein said antigenic peptide consists of residues 1 to 8 of SEQ ID NO:1.

Claim 28 (Cancelled).

29 (Currently Amended). The immunizing composition of claim 251, wherein said antigenic peptide consists of the amino acid sequence of SEQ ID NO:5.

Claims 30-41 (Cancelled).

42 (Previously Presented). The immunizing composition of claim 4, wherein the residue at position 6 of SEQ ID NO:1 is Met.

43 (Previously Presented). The immunizing composition of claim 4, wherein the residue at position 6 of SEQ ID NO:1 is Leu.

44 (Previously Presented). An antigenic peptide consisting of 6-14 amino acid residues of the amyloid precursor protein (A $\beta$ PP) that span the  $\beta$ -secretase cleavage site of A $\beta$ PP.

45 (Previously Presented). The antigenic peptide of claim 44, wherein said antigenic peptide comprises residues 1 to 8 of SEQ ID NO:1.

46 (Previously Presented). The antigenic peptide of claim 45, wherein the residue at position 6 of SEQ ID NO:1 is Met.

47 (Previously Presented). The antigenic peptide of claim 45, wherein the residue at position 6 of SEQ ID NO:1 is Leu.

48 (Previously Presented). The antigenic peptide of claim 44, wherein said antigenic peptide consists of 1 to 8 of SEQ ID NO:1.

49 (Previously Presented). The antigenic peptide of claim 44, wherein said antigenic peptide comprises the amino acid sequence of SEQ ID NO:5.

50 (Previously Presented). The antigenic peptide of claim 44, wherein said antigenic peptide consists of the amino acid sequence of SEQ ID NO:5.

51 (New). The immunizing composition of claim 1, wherein said antigenic product comprises an antigenic peptide comprising an A $\beta$ PP epitope that spans the  $\beta$ -secretase cleavage site of A $\beta$ PP.

52 (New). The immunizing composition of claim 1, wherein said antigenic product comprises a display vehicle and an antigenic peptide displayed on said display vehicle, said antigenic peptide comprising an A $\beta$ PP epitope that spans the  $\beta$ -secretase cleavage site of A $\beta$ PP.

53 (New). The immunizing composition of claim 51, wherein said antigenic peptide comprises residues 1 to 8 of SEQ ID NO:1.

54 (New). The immunizing composition of claim 53, wherein the residue at position 6 of SEQ ID NO:1 is Met.

55 (New) . The immunizing composition of claim 53,  
wherein the residue at position 6 of SEQ ID NO:1 is Leu.

56 (New) . The immunizing composition of claim 51,  
wherein said antigenic peptide comprises the amino acid  
sequence of SEQ ID NO:5.

57 (New) . The immunizing composition of claim 51,  
wherein said antigenic peptide comprises two overlapping A $\beta$ PP  
epitopes that both span the  $\beta$ -secretase cleavage site of A $\beta$ PP.

58 (New) . The immunizing composition of claim 57,  
wherein said two overlapping A $\beta$ PP epitopes are identical.